USB DISPLAY ADAPTER

USER MANUAL

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INTRODUCTION

Thank you for purchased the **USB DISPLAY ADAPTER**. The **USB DISPLAY ADAPTER** enables you to connect the display devices (CRT/LCD monitor, projector) to your desktop or notebook PC. The connected display can act as mirrored or extended desktop of the main display on your PC. The flexibility of the common USB 2.0 technology saves the need to open the computer or struggling with compatibility issues related to the VGA card.

FEATURES

- USB 2.0 compliant
- Support display resolution up to VGA : 1600 x 1200 / DVI: 1680 x 1050
- Plug-and-Play USB connectivity
- Support Multi-Display extension of one computer system
- Friendly software targeted to ease your daily USB Display experience
  - Identify Monitors
  - Multi-Display Control Panel
  - Shortcut to access Windows Display Setting dialog

SYSTEM REQUIREMENTS

- Available USB 2.0 port
- Minimum Requirement to use one (1) USB Display Adapter:
  - CPU: Intel/AMD Single Core 1.2 GHz or higher processor
  - RAM: 512MB memory or higher
- 2~3 Displays: (additional USB display adapters)
  - CPU: Intel/AMD Single Core 2.2 GHz or higher processor
  - RAM: 1GB memory or higher
- 4~6 Displays: (additional USB display adapters)
  - CPU: Intel/AMD Dual Core 1.8 GHz or higher processor
  - RAM: 1GB memory or higher
- Windows XP / Vista / 7 / 8 / 8.1 (32-bit or 64-bit)

PACKAGE CONTENTS

- USB DISPLAY ADAPTER * 1
- Driver / Manual CD * 1
- Quick Installation Guide * 1

SUPPORTED COMMON DISPLAY RESOLUTION

Aspect Ratio	Resolution	USB - VGA		USB – DVI	
		16bits	32 bits	16 bits	32bits
4:3	1600 x 1200	V	V		
16:10	1680 x 1050	V	V	V	V
16:9	1600 x 900	V	V	V	V
16:10	1440 x 900	V	V	V	V
4:3	1400 x 1050	V	V	V	V
16:9	1360 x 768	V	V	V	V
5:4	1280 x 1024	V	V	V	V
4:3	1280 x 960	V	V	V	V
16:10	1280 x 800	V	V	V	V
15:9	1280 x 768	V	V	V	V
16:9	1280 x 720	V	V	V	V
4:3	1152 x 864	V	V	V	V
4:3	1024 x 768	V	V	V	V
4:3	800 x 600	V	V	V	V

- **Monitor refresh frequency:** 60 Hz

TECHNICAL SPECIFICATIONS

Operating System	**Windows XP/Vista/7/8 Compatible**
Video Output Connector	**D-Sub 15pin (female) – Model: USB-VGA** **DVI-I – Model: USB-DVI**
Case Material	**ABS**
Power Source	**Bus Powered**

NOTES

- Please visit our website to update the latest driver version for the good performance.
- System reboot is required for the driver installation.
- AC power adapter is required for external USB Hub while multiple display adapters are connecting.
- Connect the external display device (monitor/projector) to the VGA/DVI connector of USB Display Adapter before connecting to USB port of computer.
- Suggests USB 2.0 for “Office Application” only. Video playback is not recommended due to USB 2.0 bandwidth limitation causing imperfect video performance.

INSTALLATION ON WINDOWS 8.1/ 8/ 7

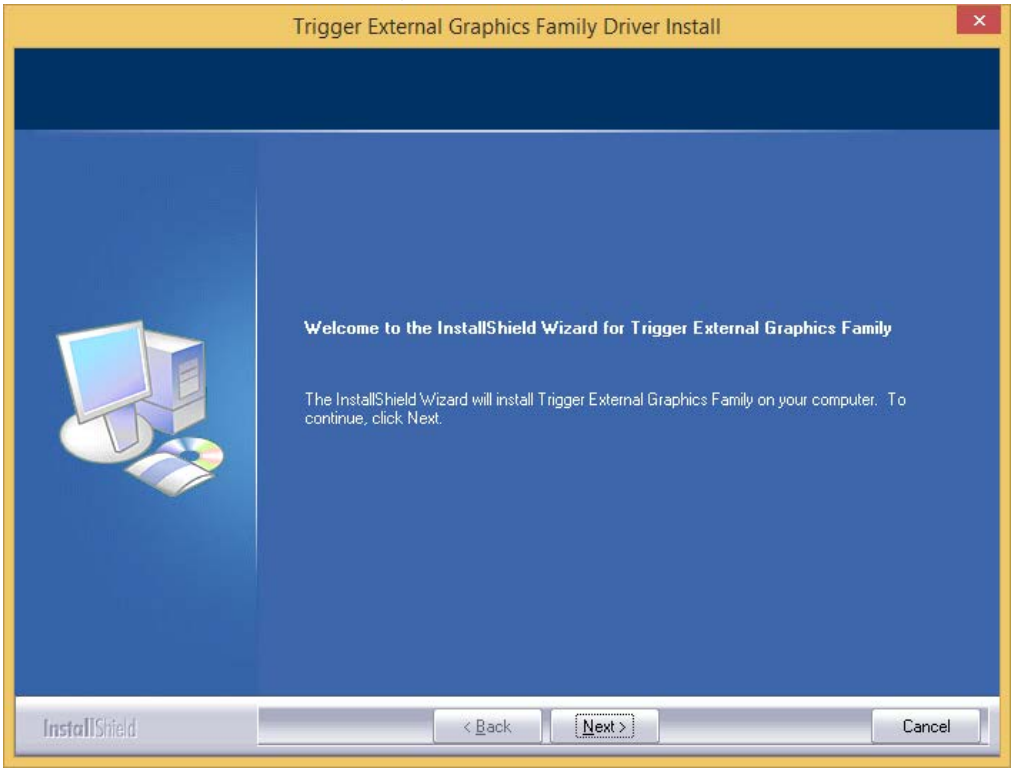
DEVICE DRIVER INSTALLATION

Installing the device driver enables your computer's operating system to recognize the **USB DISPLAY ADAPTER** once it's connected. Please check your operating system and refer to the appropriate installation procedure to begin installing the device driver.

This section illustrates the simple device driver installation procedure for computer running **Windows 8.1** operating system. Please make sure the **USB DISPLAY ADAPTER is unplugged** from your PC or Notebook before executing the setup program.

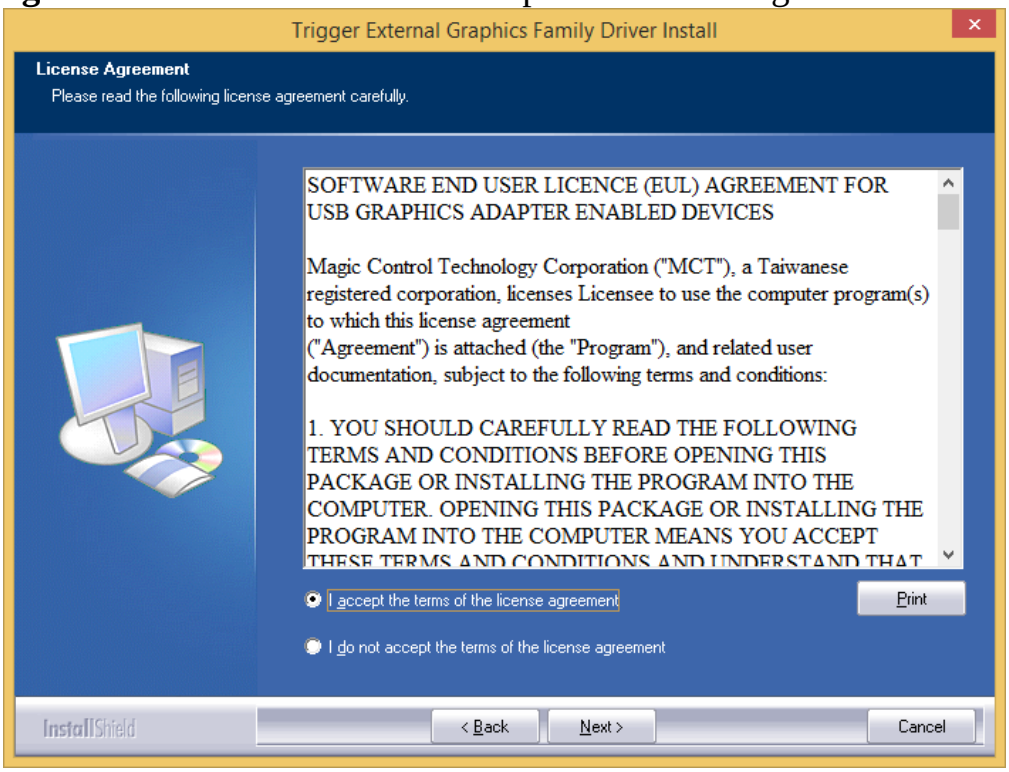
Step 1.
Insert the Driver CD into the CD-ROM drive; the setup program should be launched automatically. If setup program does not begin automatically, click Start, Run and double click "**D:\Setup.exe**" (where D: is the path of your CD-ROM drive).

Step 2.
Driver Installation Wizard, click "**Next**" to continue.


Trigger External Graphics Family Driver Install
Welcome to the InstallShield Wizard for Trigger External Graphics Family
The InstallShield Wizard will install Trigger External Graphics Family on your computer. To continue, click Next.
InstallShield
< Back
Next >
Cancel

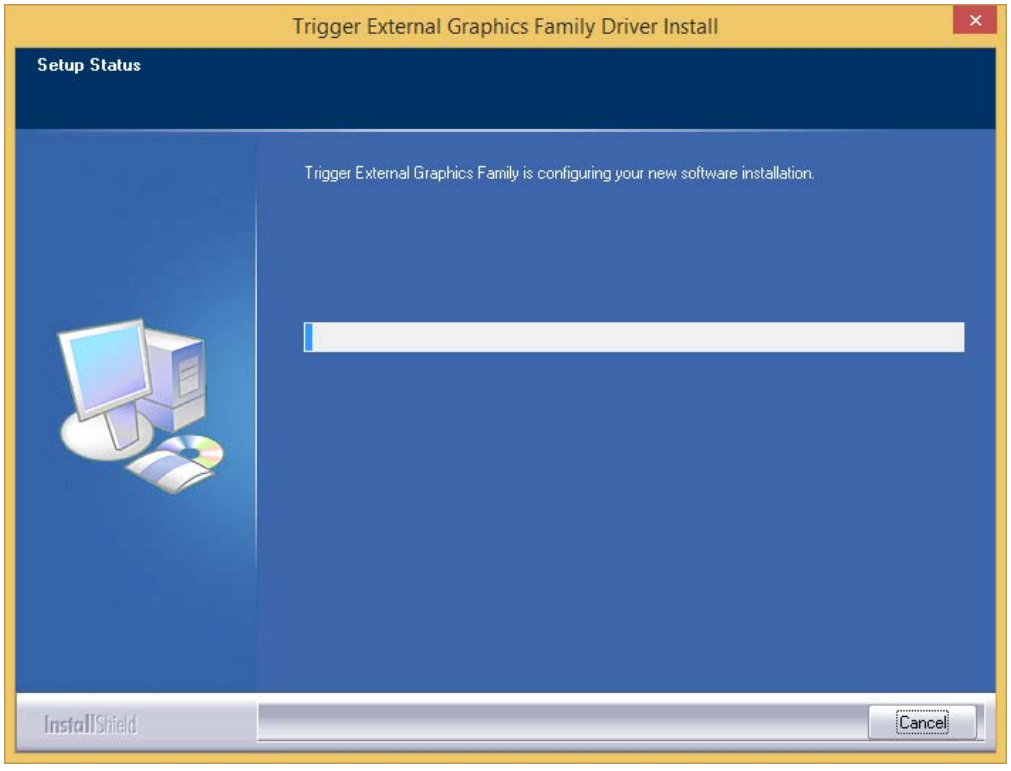
Step 3.

License Agreement; please review it and check "**I accept the terms of the license agreement.**" Click "**Next**" to accept the License Agreement.


Trigger External Graphics Family Driver Install
License Agreement
Please read the following license agreement carefully.
SOFTWARE END USER LICENCE (EUL) AGREEMENT FOR USB GRAPHICS ADAPTER ENABLED DEVICES
Magic Control Technology Corporation ("MCT"), a Taiwanese registered corporation, licenses Licensee to use the computer program(s) to which this license agreement ("Agreement") is attached (the "Program"), and related user documentation, subject to the following terms and conditions:
1. YOU SHOULD CAREFULLY READ THE FOLLOWING TERMS AND CONDITIONS BEFORE OPENING THIS PACKAGE OR INSTALLING THE PROGRAM INTO THE COMPUTER. OPENING THIS PACKAGE OR INSTALLING THE PROGRAM INTO THE COMPUTER MEANS YOU ACCEPT
I accept the terms of the license agreement
I do not accept the terms of the license agreement
Print
InstallShield
< Back
Next >
Cancel

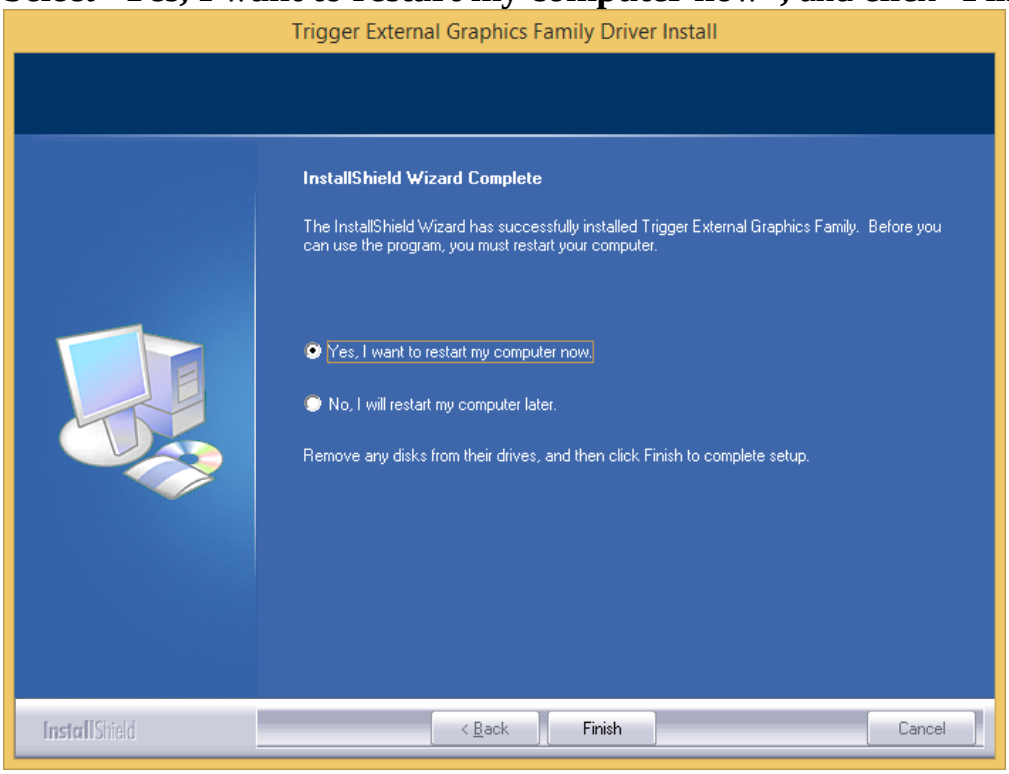
Step 4.

Setup is searching for installed features.....


Trigger External Graphics Family Driver Install
Setup Status
Trigger External Graphics Family is configuring your new software installation.
InstallShield
Cancel

Step 5.

Select "**Yes, I want to restart my computer now",** and click "**Finish**" to reboot.

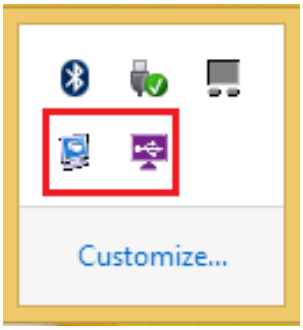

Trigger External Graphics Family Driver Install
InstallShield Wizard Complete
The InstallShield Wizard has successfully installed Trigger External Graphics Family. Before you can use the program, you must restart your computer.
Yes, I want to restart my computer now.
No, I will restart my computer later.
Remove any disks from their drives, and then click Finish to complete setup.
InstallShield
< Back
Finish
Cancel

Step 6. HARDWARE DEVICE DRIVER INSTALLATION (AFTER REBOOT)

Please connect the external display device (monitor/projector) to the VGA/DVI connector of **USB DISPLAY ADAPTER** and turn on this external display device.

Then plug the **USB DISPLAY ADAPTER** into an available USB port of your PC or Notebook. The device driver software setup will begin automatically.

After the driver is configured, you will see there are two icons "Super Utility" & "USB Display (Trigger) Utility" on the taskbar.



The extended display will be shown on the attached display device. You may begin to use the USB Display Adapter with your display device.

※ The "USB Display (Trigger) Utility" icon won't be appeared if the USB Display Adapter does not connect to the USB host.

Step 7. INSTALLATION OF MULTIPLE USB DISPLAY ADAPTERS

Please connect the external display device (monitor/projector) to the VGA/DVI connectors of USB Display Adapters and turn on the external display device first.

Plug another **USB DISPLAY ADAPTERS** into the available USB port of your PC or Notebook (USB host). The device driver software setup will begin automatically.

After the driver is complete configured, the USB extended display will be shown on the attached display device. To make sure the USB Display Adapters worked correctly, please reboot the computer after finished the installation. After reboot the computer, the USB extended displays will be shown on the attached display device.

All USB Display devices are now installed completely and ready to use.

※ *You may notice the screen flash or go black during the driver installation. It is part of the normal process.*

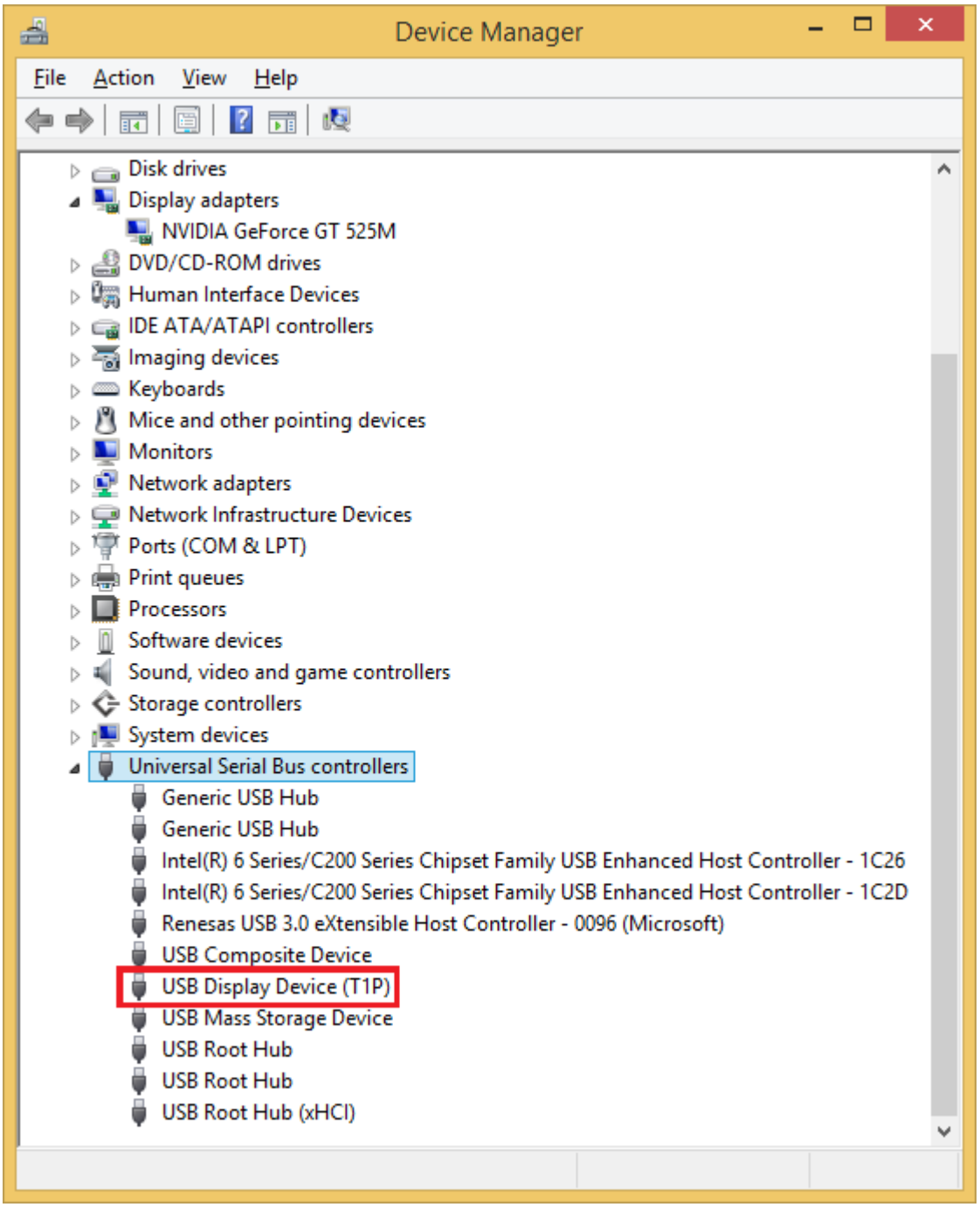
VERIFYING DEVICE DRIVER INSTALLATION (WINDOWS 8.1)

The following procedure allows you to verify the device driver installation.

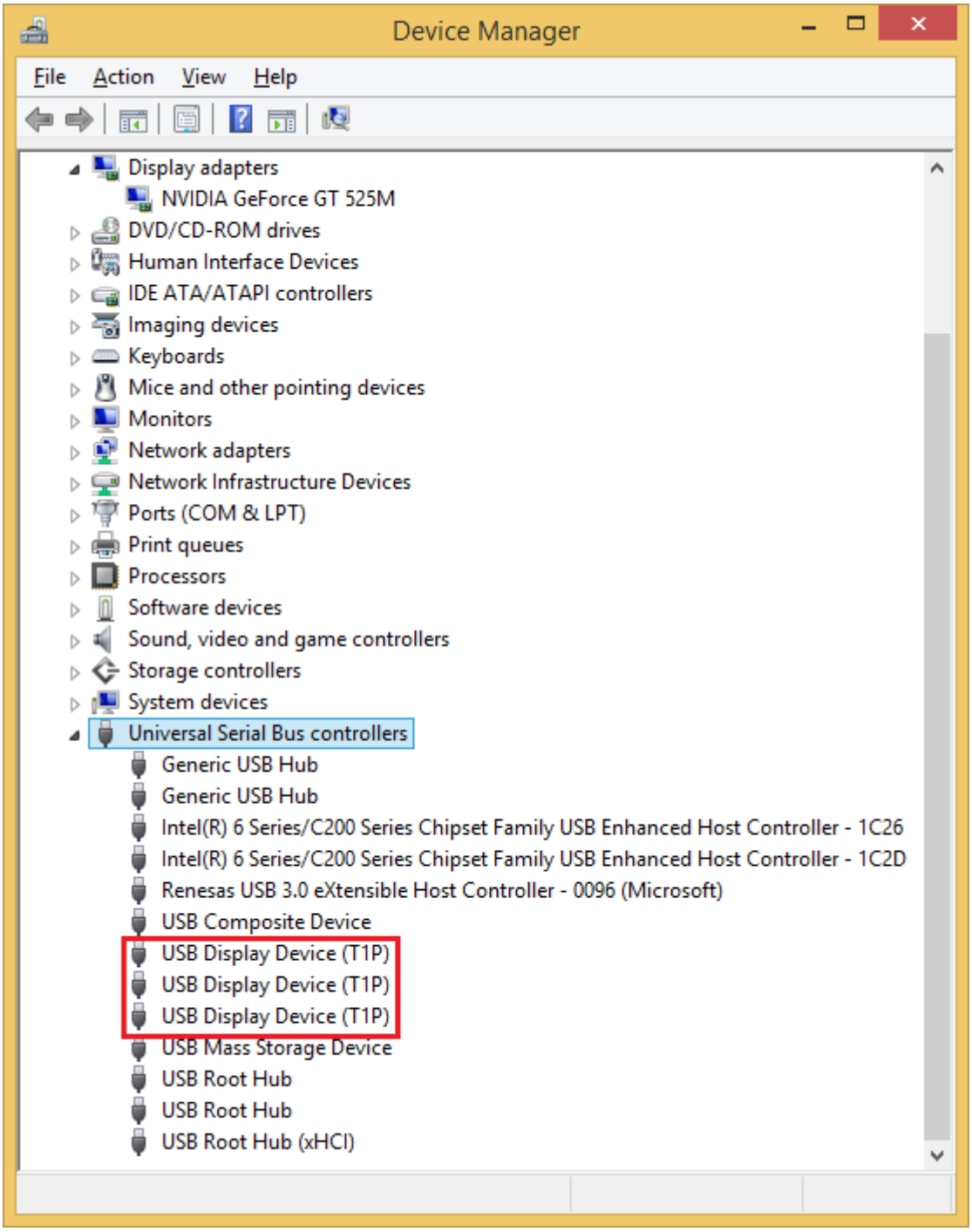
Swipe in from the right edge of the screen, and then click "**Search"→** enter **"Device Manager". (**Right click "Start" at the taskbar, click "Device Manager")

Plug-in the **USB DISPLAY ADAPTER**, then double click "**Universal Serial Bus controllers**". Begin verification by make sure highlighted devices were added to the system.

- **Single USB VGA/DVI Display Adapter installation on the computer**

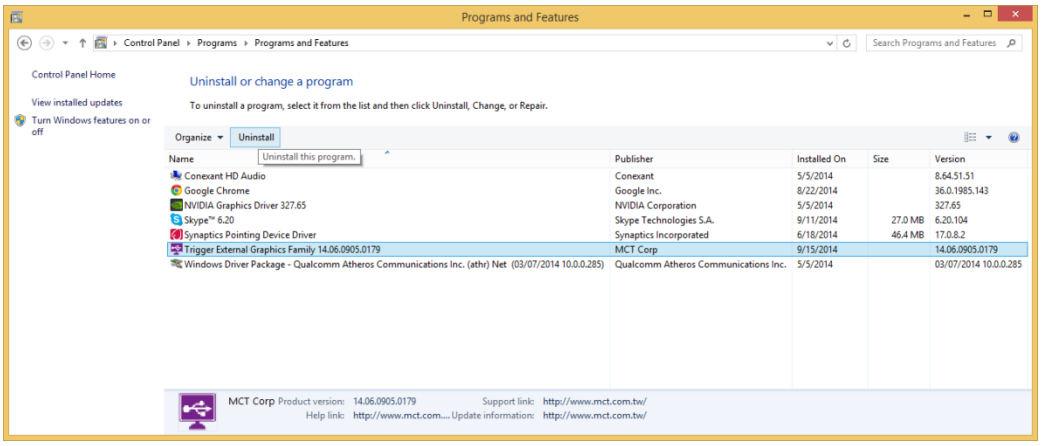


➢ Multiple USB Display Adapters installation on the computer

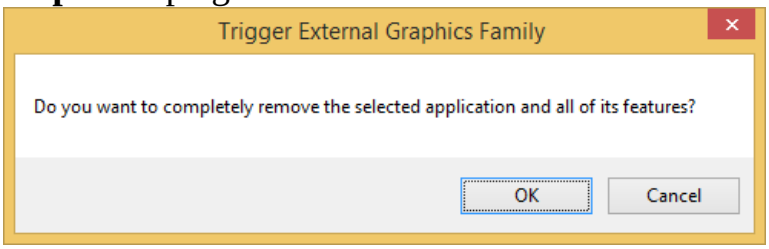


DEVICE DRIVER UN-INSTALLATION

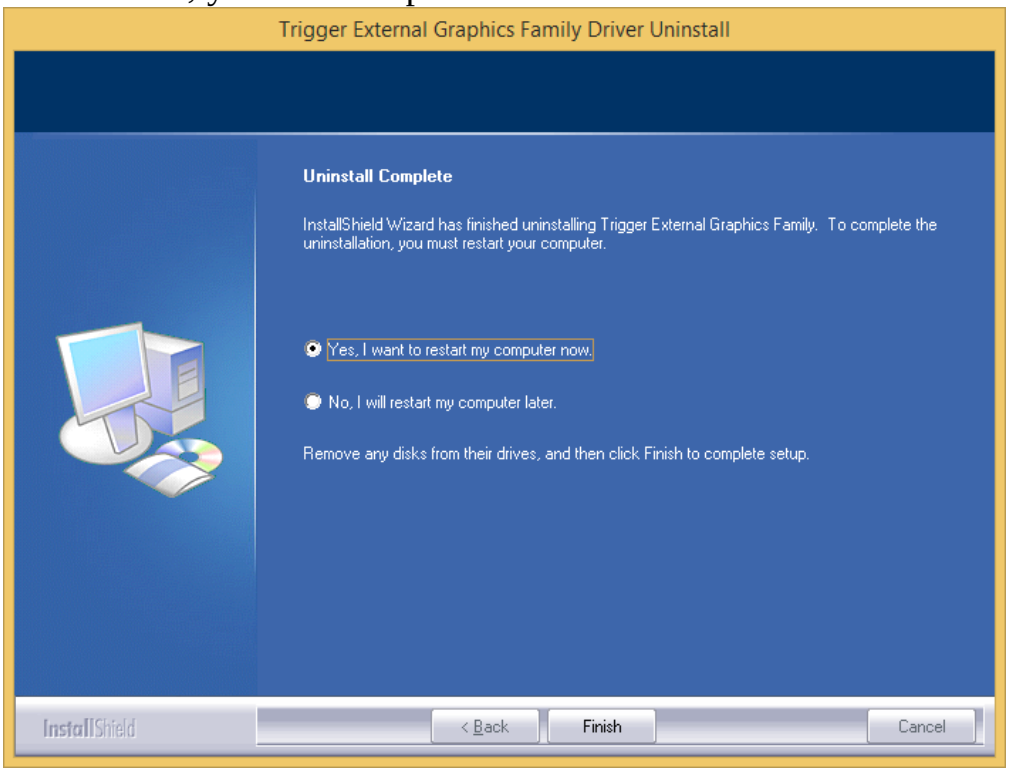
Step 1. Rick click "**Start**" at the taskbar, then click →**"Programs and Features".**
Select "**Trigger External Graphics Family 14.xx.xxxx.0179"**.
Click "**Uninstall**" button.



Step 2. Unplug the **USB DISPLAYADAPTER** and click **"OK"** to continue.


Trigger External Graphics Family
Do you want to completely remove the selected application and all of its features?
OK
Cancel

Step 3. Select "**Yes, I want to restart my computer now**" and click "**Finish**" to reboot.
After reboot, you will complete the driver un-installation.


Trigger External Graphics Family Driver Uninstall
Uninstall Complete
InstallShield Wizard has finished uninstalling Trigger External Graphics Family. To complete the uninstallation, you must restart your computer.
Yes, I want to restart my computer now.
No, I will restart my computer later.
Remove any disks from their drives, and then click Finish to complete setup.
InstallShield
< Back
Finish
Cancel

INSTALLATION ON WINDOWS XP

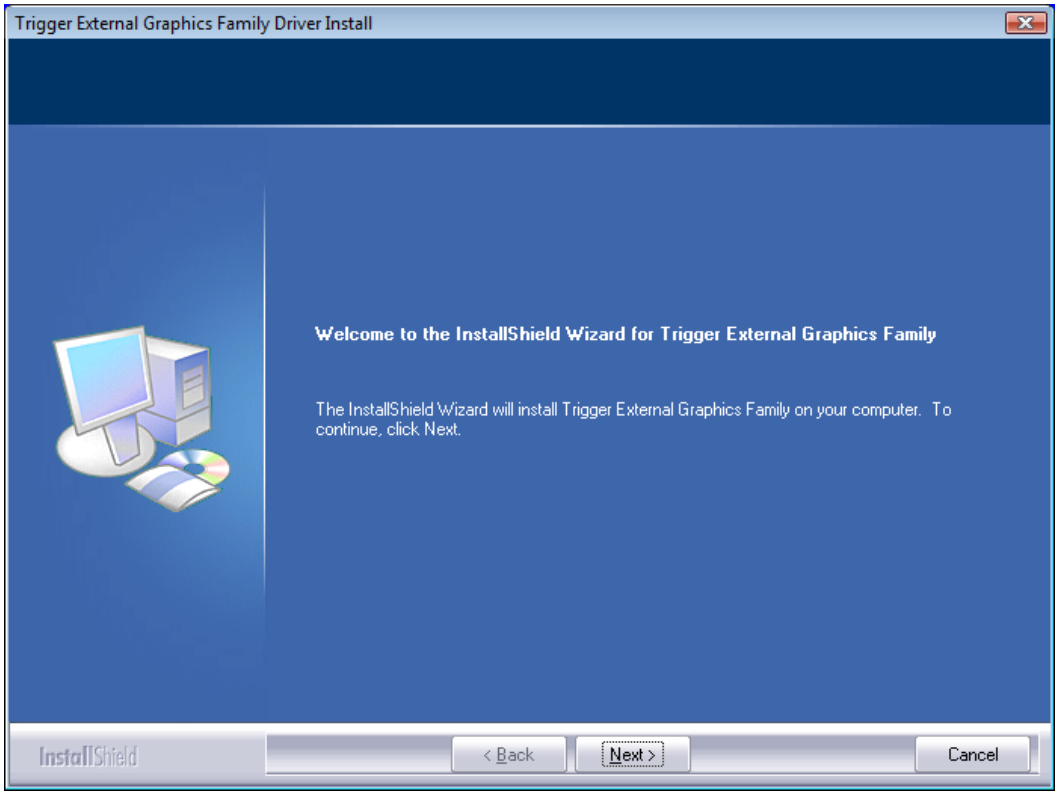
DEVICE DRIVER INSTALLATION

Installing the device driver enables your computer's operating system to recognize the **USB DISPLAY ADAPTER** once it's connected. Please check your operating system and refer to the appropriate installation procedure to begin installing the device driver.

This section illustrates the simple device driver installation procedure for computer running **Windows XP** operating system. Please make sure the **USB DISPLAY ADAPTER is unplugged** from your PC or Notebook before executing the setup program.

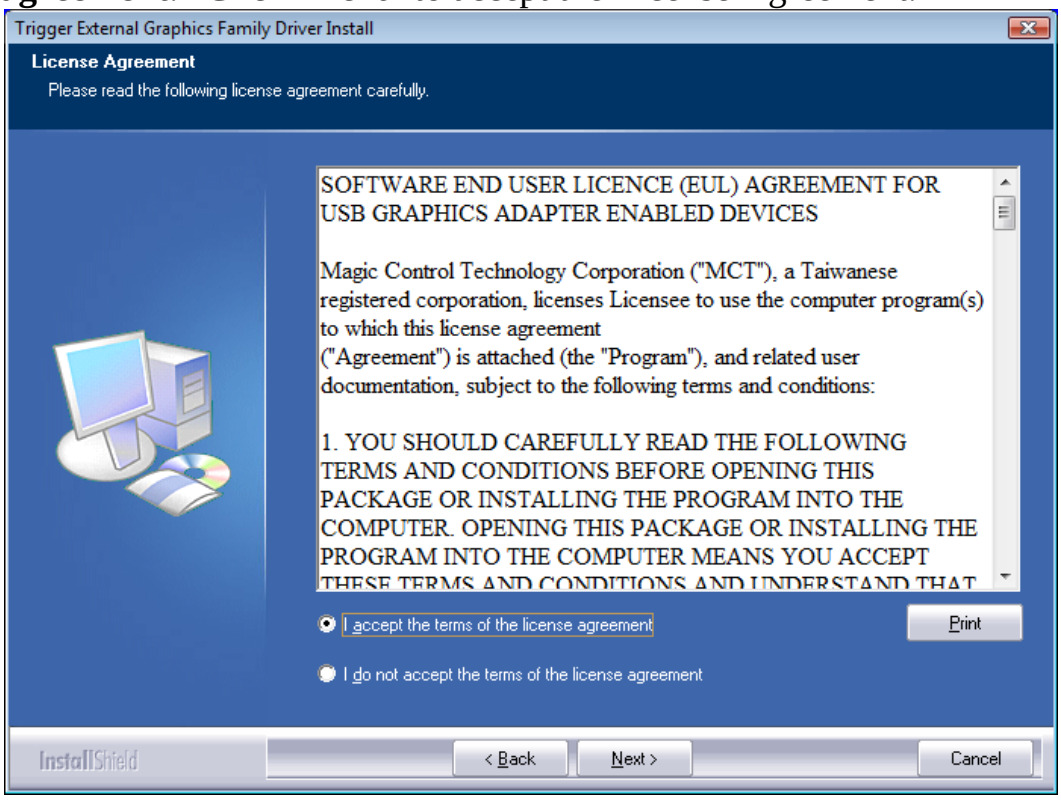
Step 1.
Insert the Driver CD into the CD-ROM drive; the setup program should be launched automatically. If setup program does not begin automatically, click Start, Run and double click "**D:\Setup.exe**" (where D: is the path of your CD-ROM drive).

Step 2.
Driver Installation Wizard, click "**Next**" to continue.


Trigger External Graphics Family Driver Install
Welcome to the InstallShield Wizard for Trigger External Graphics Family
The InstallShield Wizard will install Trigger External Graphics Family on your computer. To continue, click Next.
InstallShield
< Back
Next >
Cancel

Step 3.

License Agreement; please read it and select **"I accept the terms of the license agreement**." Click "**Next**" to accept the License Agreement.


Trigger External Graphics Family Driver Install
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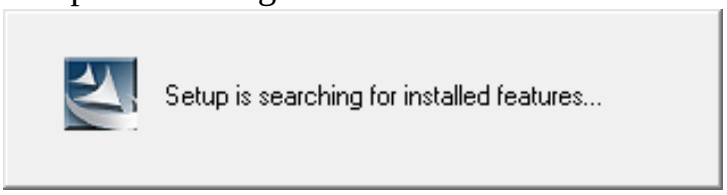
I do not accept the terms of the license agreement
Print
InstallShield
< Back
Next >
Cancel

Step 4.

Setup is searching for installed features…..

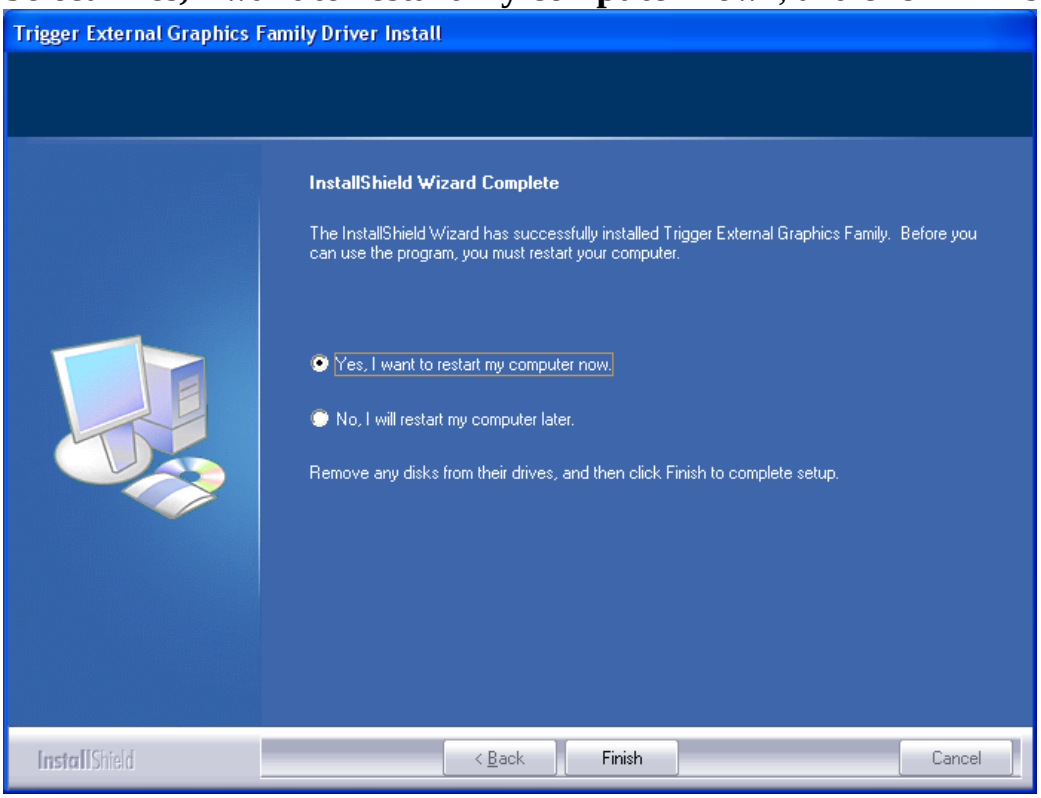


※ *You may notice the screen flashes during the driver installation. It is part of the normal process.*

※ *When the Microsoft Windows Security warning dialogue box appears, please select "**Continue Anyway**" to continue with the installation. This will not affect the device driver installation and the device usage.*

Step 5.

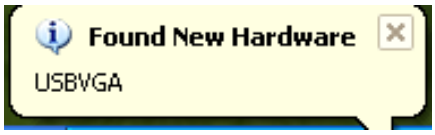
Select "**Yes, I want to restart my computer now**", and click "**Finish**" to reboot.

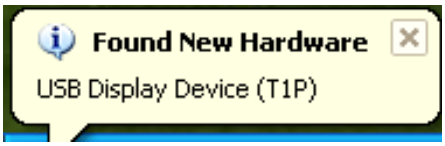

Trigger External Graphics Family Driver Install
InstallShield Wizard Complete
The InstallShield Wizard has successfully installed Trigger External Graphics Family. Before you can use the program, you must restart your computer.
Yes, I want to restart my computer now.
No, I will restart my computer later.
Remove any disks from their drives, and then click Finish to complete setup.
InstallShield
< Back
Finish
Cancel

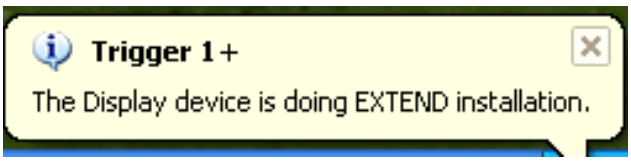
Step 6. HARDWARE DEVICE DRIVER INSTALLATION (AFTER REBOOT)

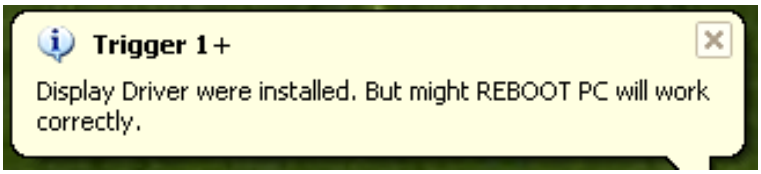
1. Please connect the external display device (monitor/projector) to the VGA/DVI connector of **USB DISPLAY ADAPTER** and turn on this external display device.

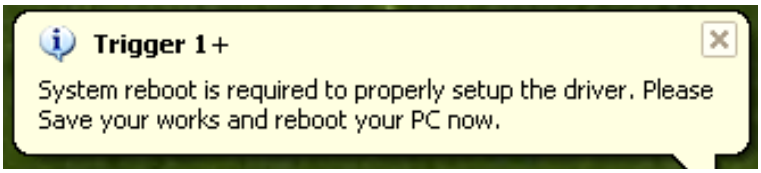
2. Then plug the **USB DISPLAY ADAPTER** into an available USB port of your computer. The device driver will be configured automatically, and you may see below notification balloons. And, the extended display will be shown on the attached display device, and you will see two icons on the lower right taskbar.











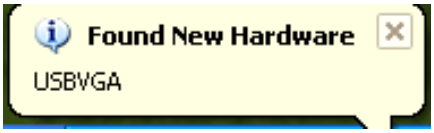
※*When the Hardware Installation Wizard dialog appears, please select "**No, not this time**" and click "**Next**" to continue. Click "**Continue Anyway**" when the Microsoft Software warning dialogue box appears. Then, click "**Finish**" to complete the Hardware Wizard.*

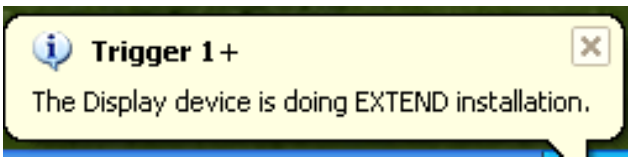
3. To make sure the USB Display Adapter worked correctly, please reboot the computer again. The device is now installed completely and ready to use.

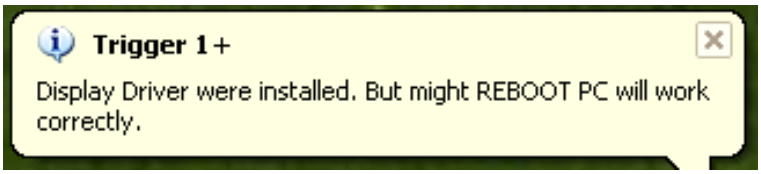
※*The "USB Display (Trigger) Utility" icon won't be appeared if the USB Display Adapter does not connect to the USB host.*

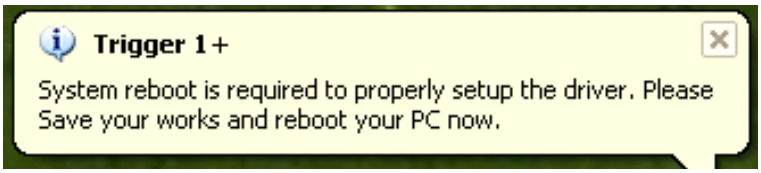
Step 7. INSTALLATION OF MULTIPLE USB DISPLAY ADAPTERS

Please plug the additional **USB DISPLAY ADAPTERS** into the available USB 2.0 port of your PC or Notebook. The setup process will begin automatically. You may see below notification balloons for each additional.









To make sure all USB Display Adapters worked correctly, please reboot the computer after finished the installation. **After reboot the computer, all USB Display devices are now installed completely and ready to use.**

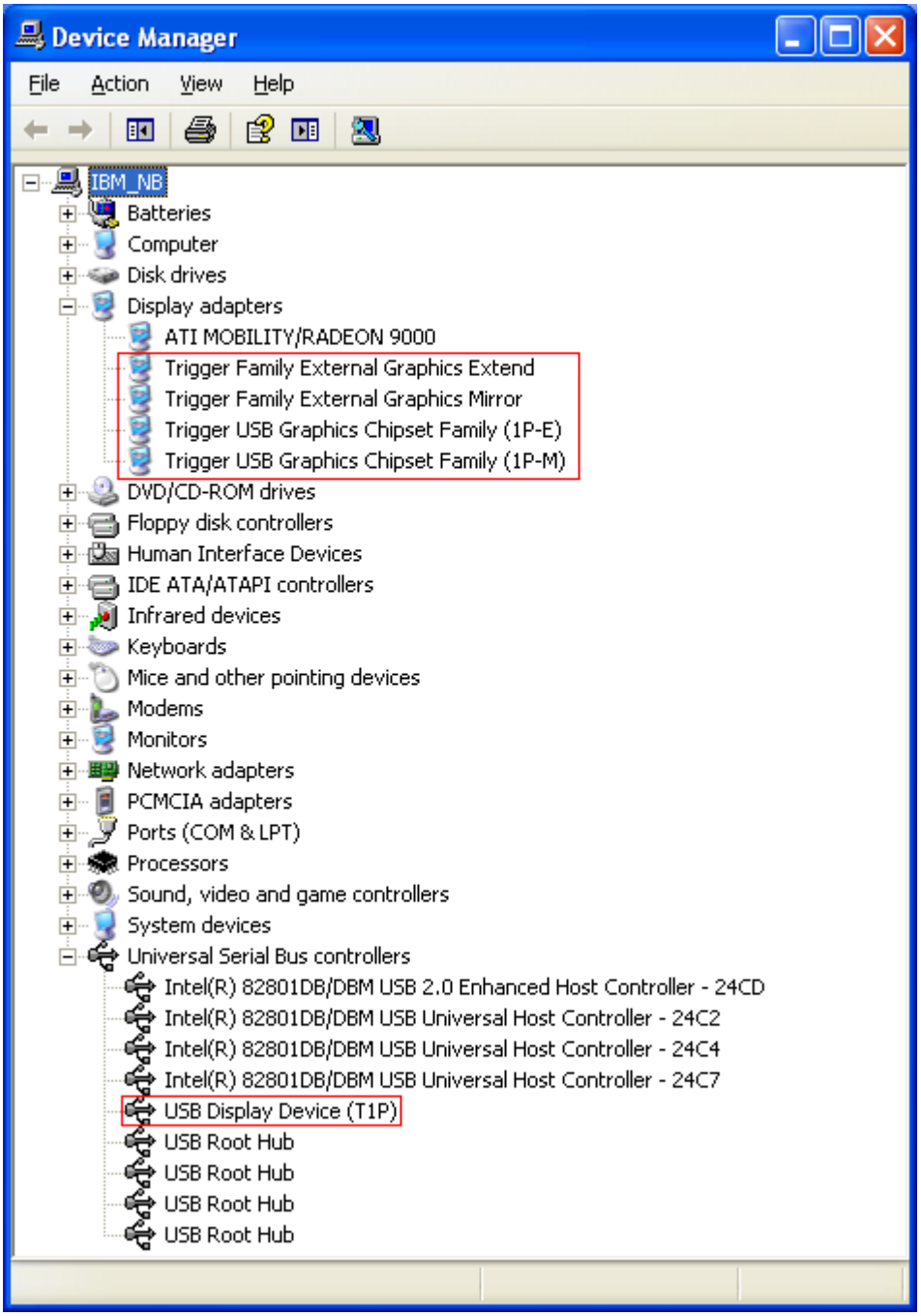
VERIFYING DEVICE DRIVER INSTALLATION (WINDOWS XP)

The following procedure allows you to verify the device driver installation.

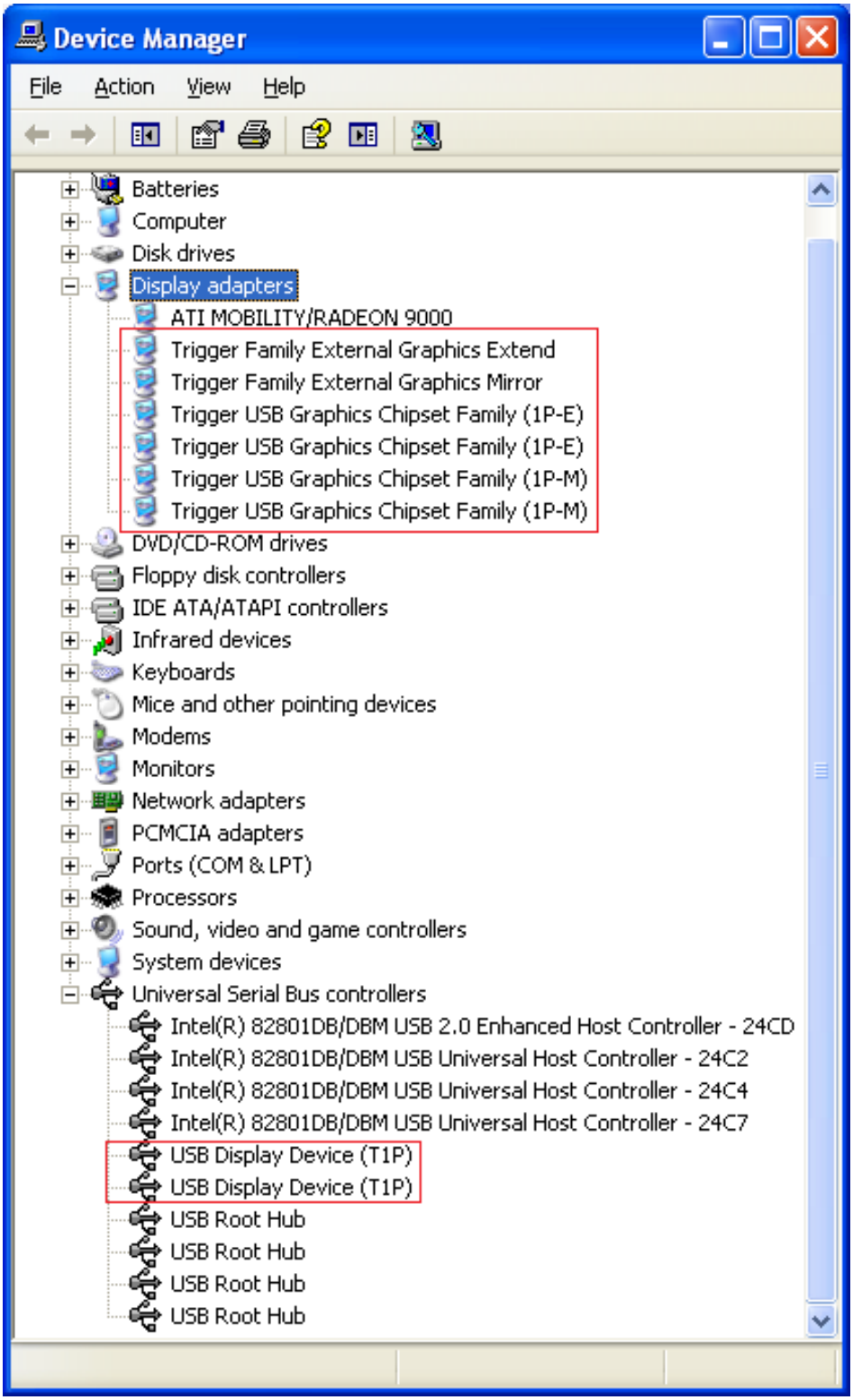
Please right click "**My Computer**" → "**Properties**" → "**Hardware**" → "**Device Manager**".

Plug-in the **USB DISPLAY ADAPTER**, then double click "**Display adapters**", and "**Universal Serial Bus controllers**". Begin verification by make sure highlighted devices were added to the system.

➢ **Single USB VGA/ DVI Display Adapter installation on the computer**



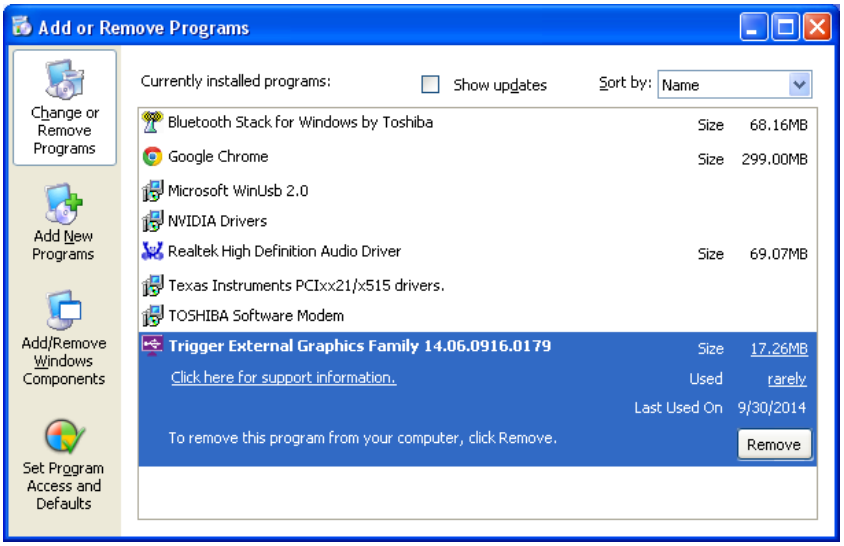
➢ Multiple USB Display Adapters installation on the computer



DEVICE DRIVER UN-INSTALLATION

Step 1. Click "Start" → "Control Panel" → "Add or Remove Programs"

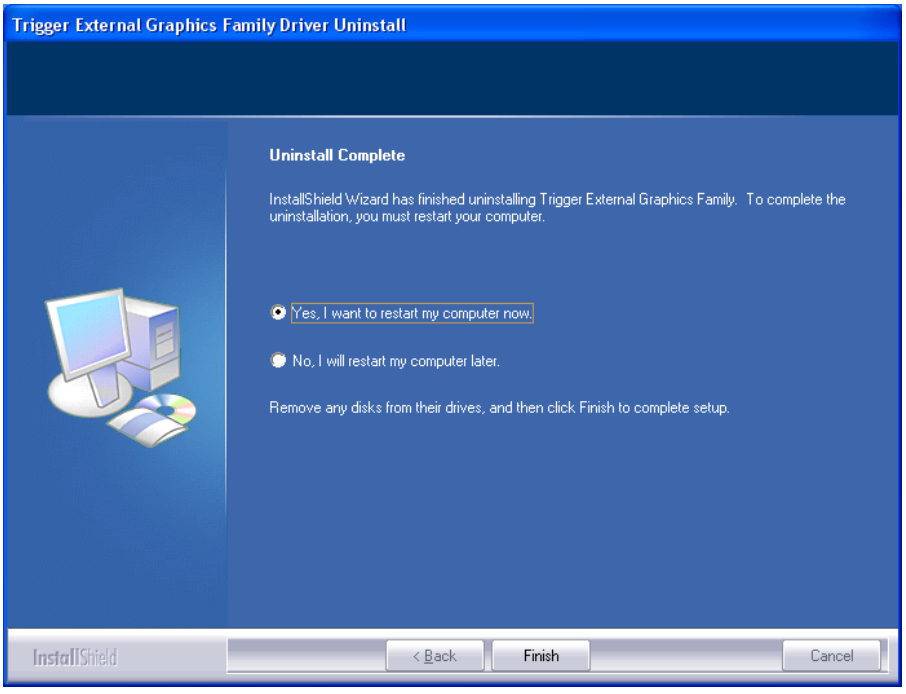
Select "**Trigger External Graphics Family 14.xx.xxxx.0179"**.
Click "**Uninstall**" button.



Step 2. Unplug the **USB DISPLAYADAPTER** and click "**OK**" to continue.

Trigger External Graphics Family
Do you want to completely remove the selected application and all of its features?
OK
Cancel

Step 3. Select "**Yes, I want to restart my computer now**" and click "**Finish**" to reboot. After reboot, you will complete the driver un-installation.

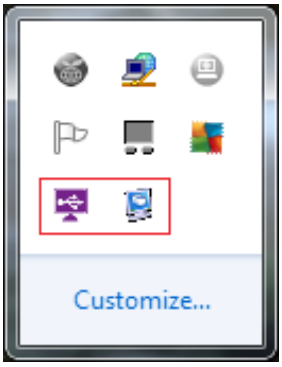

Trigger External Graphics Family Driver Uninstall
Uninstall Complete
InstallShield Wizard has finished uninstalling Trigger External Graphics Family. To complete the uninstallation, you must restart your computer.
Yes, I want to restart my computer now.
No, I will restart my computer later.
Remove any disks from their drives, and then click Finish to complete setup.
InstallShield
< Back
Finish
Cancel

FUNCTION DESCRIPTION

This section describes several friendly functions provided by the **USB DISPLAY ADAPTER** designed to ease your single or multiple USB display experience**.** A display device described in this section means devices such as monitor and projector...

ACCESS USB DISPLAY ADAPTER UTILITY (WINDOWS 7/ 8/ 8.1)

Make sure the USB Display Adapter is attached to the PC, and will see two icons "Super Utility" and "USB Display (Trigger) Utility" on the taskbar.



Click these two icons to access the variety of functions associated to the USB Display adapter.

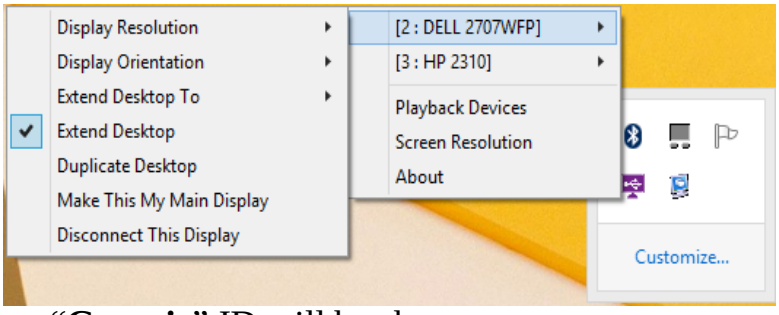
USB Display (Trigger) Utility

- It won't be shown on the taskbar if the USB Display Adapter does not connect to the USB port of your PC.

DISPLAY ID

– Smart Display Device ID Detection

USB Display Adapter supports VESA defined DDC/EDID. The utility will show the **display device ID** whenever it is attached to the USB Display Adapter.



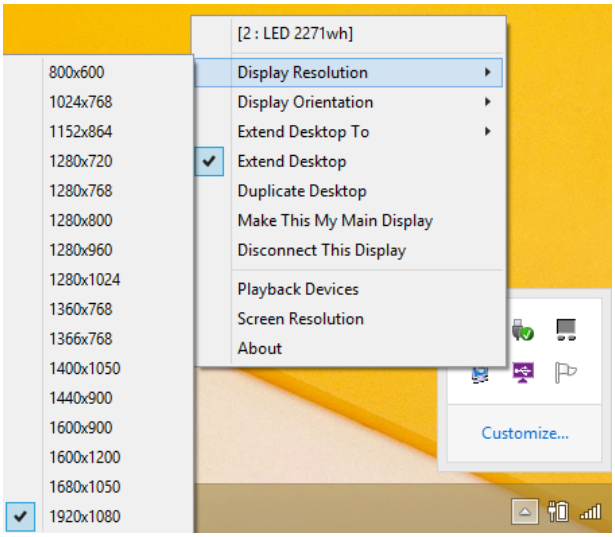
If there is no display device attached to the USB Display Adapter, a "**Generic**" ID will be shown.

In some cases, the attached display device does not support EDID, the ID will also defined as "**Generic**".

DISPLAY RESOLUTION

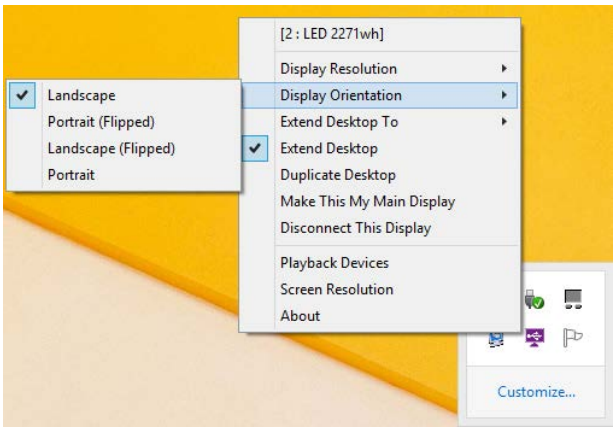
– Fast Access to Display Resolution Setting

The resolution list will show up when you move the cursor over “Display Resolution”. Select and click the resolution you want.



DISPLAY ORIENTATION

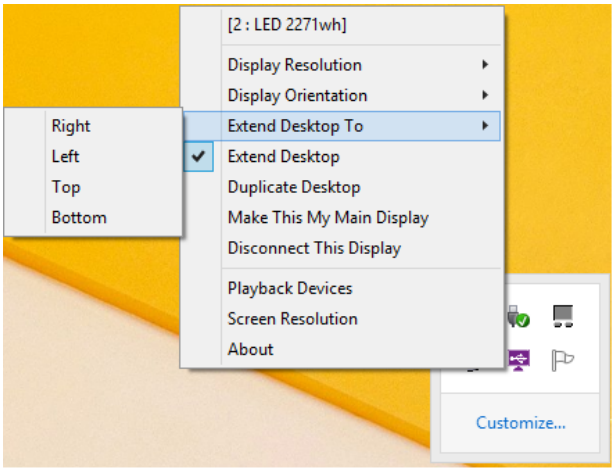
There are four options available: “Landscape”, “Portrait (Flipped)”, “Landscape (Flipped)”, and “Portrait” that under the extended or primary display mode.



EXTENDED DESKTOP TO

To adjust the position of extended display to be “RIGHT”, “ LEFT”, “TOP”, or “BOTTOM”.

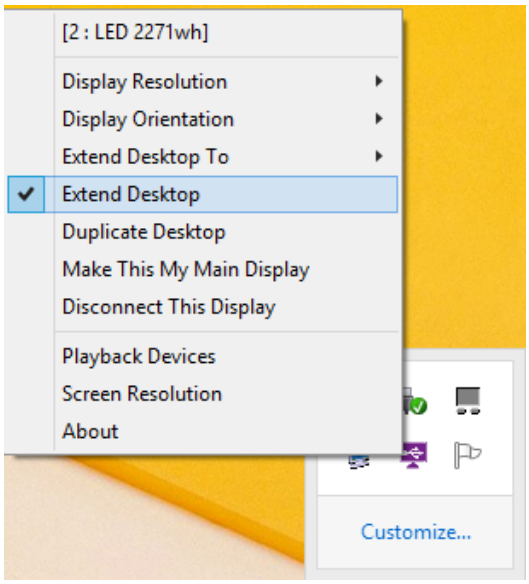
.



DISPLAY MODE

- **"EXTEND DESKTOP" (DEFAULT)**

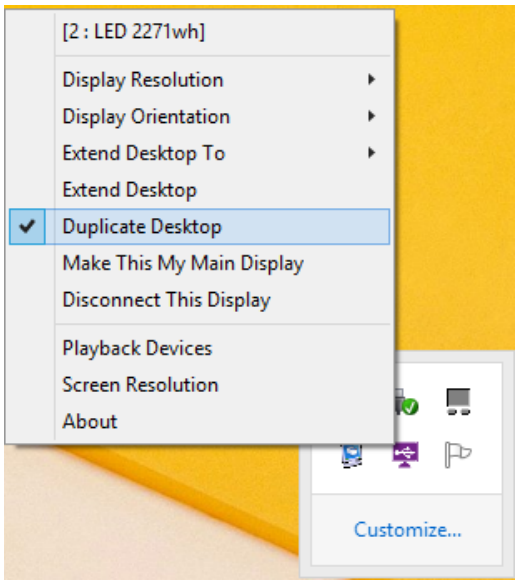
  A default display mode, this feature allows the attached USB Display enable display device to work as "Extended" display of the on-board screen.



- **"DUPLICATE DESKTOP"**

  This feature allows the same contents of on-board screen to be displayed (mirroring) to the USB Display enabled display device. For example, the on-board screen's resolution is 1024x768x32bit, and the USB Display enabled device will set as the same resolution.

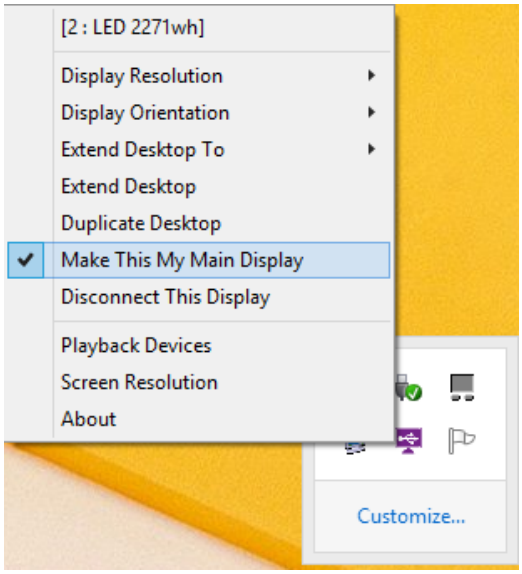
  Be note when "Duplicate Desktop" is selected, the function of "Display Orientation" will be disabled automatically.



- **"MAKE THIS MY MAIN DISPLAY"**

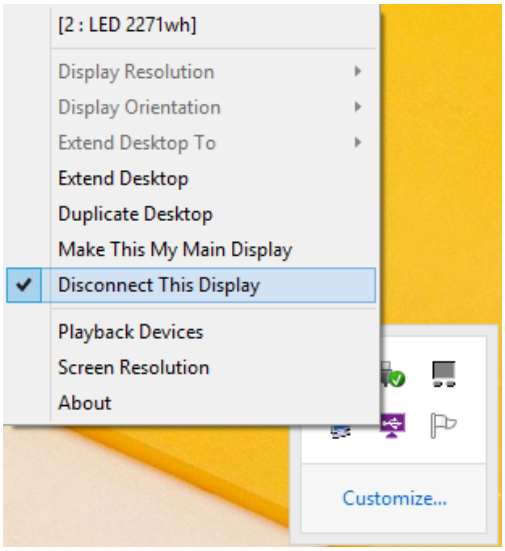
  This feature allows USB Display enabled device to act as the main display. The on-board screen will work as the extended display.

  Please be advised that some display utility and drivers that shipped with certain AGP and built-in display adapters may prevent this option from working on some Windows XP systems. You may disable the other utility program (usually found in the same taskbar located on the bottom right corner) to make this function work properly.



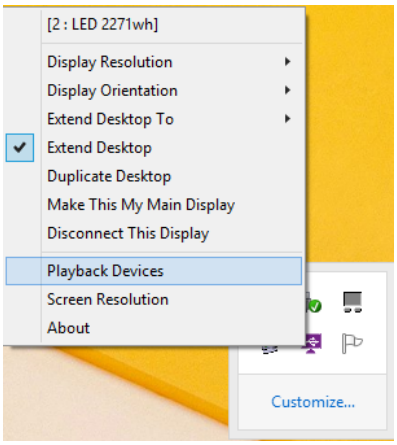
- **"DISCONNECT THIS DISPLAY"**

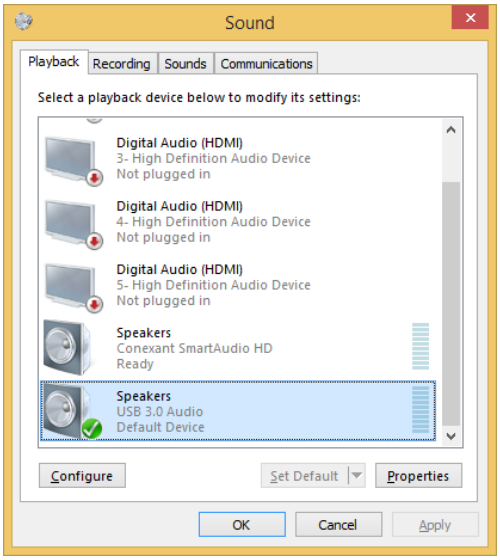
  This option disables the video output from **USB DISPLAY ADAPTER.**



- **"PLAY BACK DEVICE"**

  Fast open to the system "**Sound**".

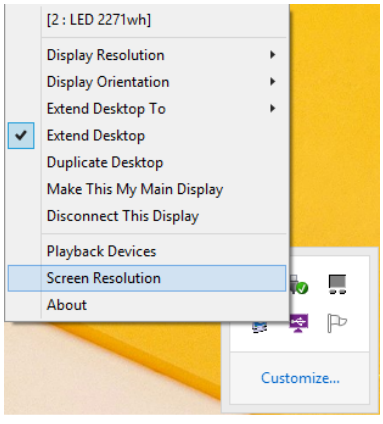


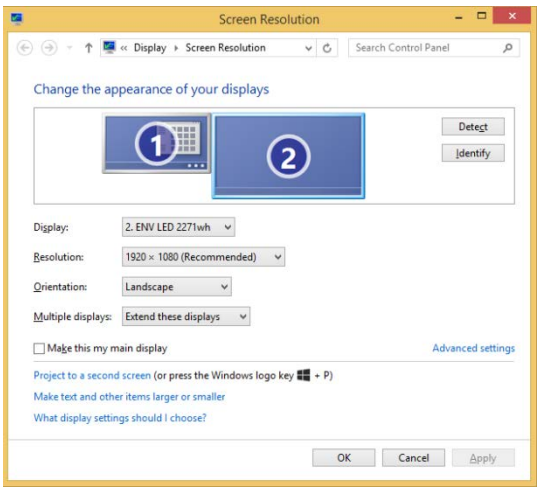


*The USB Audio is the default audio output when connects with USB HDMI Display Adapter.

- **"SCREEN RESOUTION"**

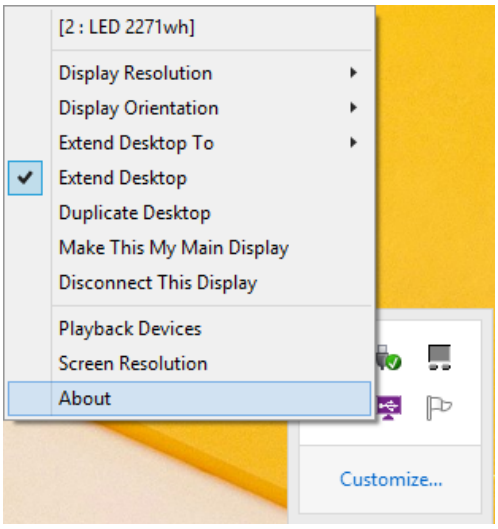
  Fast access to the system "Screen Resolution"

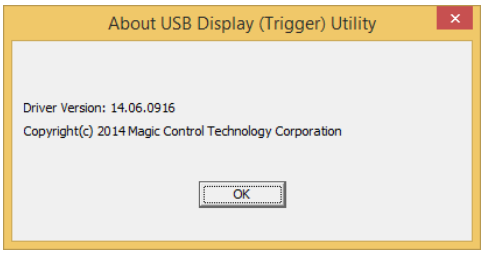




- **"ABOUT"**

  To check the current driver version.



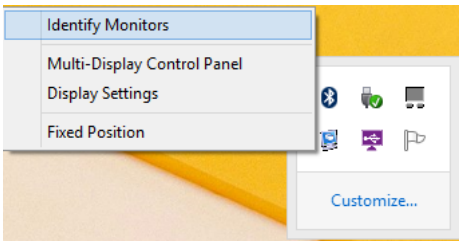


Super Utility

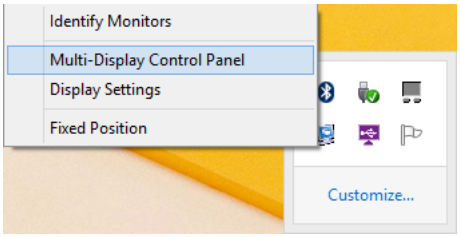
- It will be shown on the taskbar once you installed the driver.

- **IDENTIFY MONITORS**

  Easy display identification via a serial number will be showed on the upper right corner of all attached display devices.



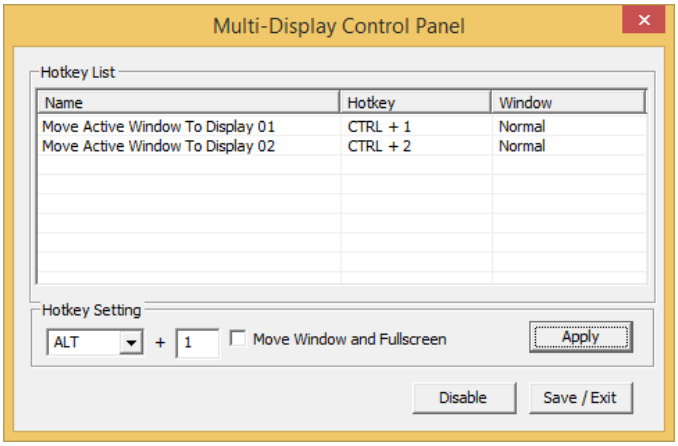
◆ MULTI-DISPLAY CONTROL PANEL



An unique feature to allow much quicker and simpler working experience under multi-display environment. A series of hotkey to quickly move active window or cursor to the desired display device (either on-board or each USB Display enabled devices).

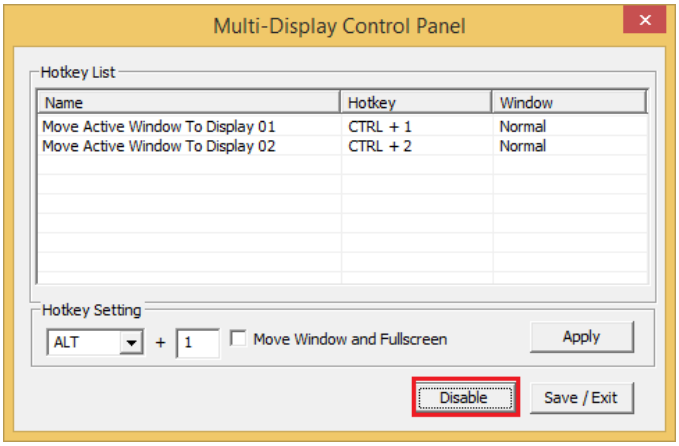
The default setting of hotkeys can be found on the Hotkey List of "Multi-Display Control Panel".

For example: Ctrl + 2 means: to move the window to the Display 2.

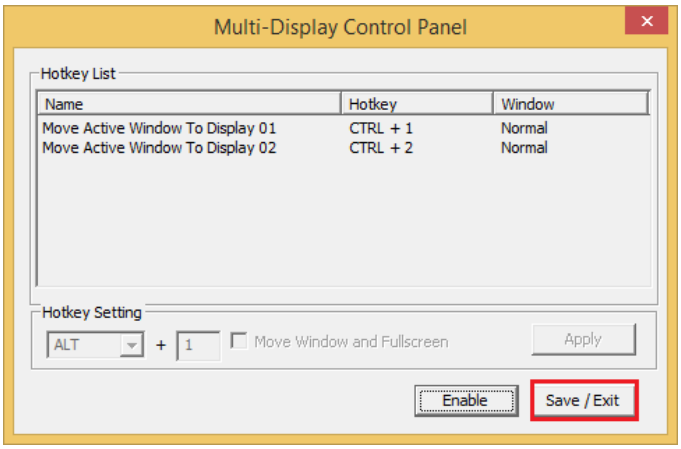


To disable the Multi-display Control Panel function:

1. Click "**Disable**".

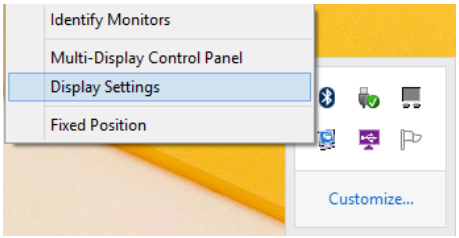


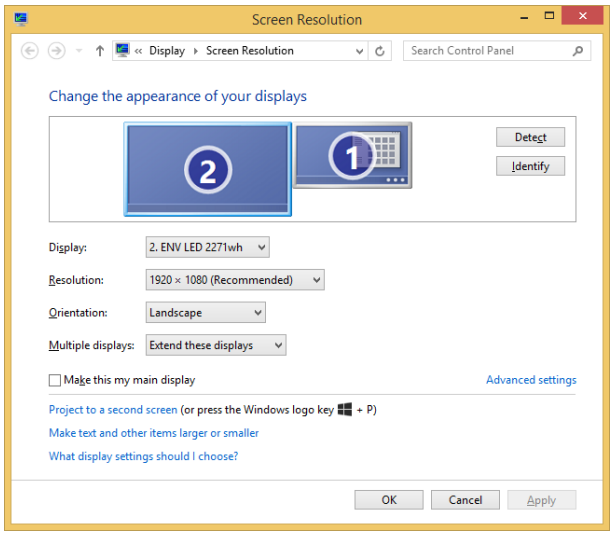
2. Click "**Save/Exit**" to exit the control panel. You have disabled the Multi-display Control Panel (hotkey) function now.



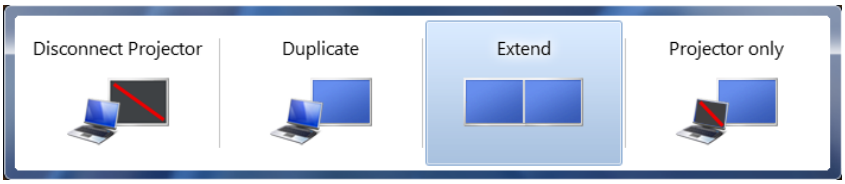
◆ DISPLAY SETTINGS

Fast access to the system “Screen Resolution”.



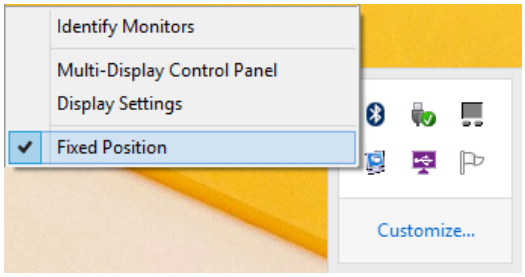


You also can press key and tap **P** to select the display modes on Windows 7/ 8/ 8.1 directly.



◆ FIXED POSITION

It remains the prior setting of display location after restart the computer.



Q&A

This section describes the common Q&A regarding to the installation or operation of the USB DISPLAY ADAPTER.

Q: Why can't I make the USB DISPLAY ADAPTER the primary display?

A: Some video cards ship their product with a utility that prevent other video cards from being set as the primary card. Check the bottom right hand corner taskbar for the utility. Disable the utility before switching our adapter to be the primary display.

Q: Why won't my DVD player work when I move it over to the extended display?

A: Some DVD playback software packages do not support playing on a second display adapter of any kind. You may try to open the program in the secondary display first before playing the DVD.

Q: Why does my mouse not move pass the right side of the screen as it should on extended desktop?

A: Check the display settings and make sure that your display number '2' is on the right side of display number '1'. You can rearrange how Windows treats each display in relation to each other in the Display Properties Settings.

Q: There are lines running horizontally up and down my screen.

A: This is due to a low refresh rate setting. You can change this in the Display Properties Settings Advanced Monitor. Make sure you select the USB DISPLAY ADAPTER first and not set the refresh rate higher than what your monitor can support. This may damage your monitor. You can also try to reset/refresh/resynchronize your monitor.

Q: Direct3D does not work?

A: This is a limitation of the adapter on Windows XP/ Windows Vista.

TROUBLESHOOTING TIPS

This section describes the general troubleshooting tips regarding to the installation or operation of the USB DISPLAY DEVICE.

Known Issues

- It is prohibited to install the other USB to Graphics drivers (example: DisplayLink software) at the same Windows operating system.
- Direct 3D is not supported under Windows XP/Vista (supports the XPDM).
- Do not support Standard VGA graphics Adapter.

General Recommendation

- Check to make sure that the device is plugged in correctly to the host system.
- Unplug the USB cable of USB graphics device and re-insert it.
- Check to see that the monitor is connected correctly and is powered ON.
- Make sure to restart your computer after the driver installation.
- Try a different USB port and/or computer.
- Unplug all other USB devices from the system.
- Try connecting the USB cable of USB graphics device to the computer directly (not via the USB Hub).
- Reset/refresh/resynchronize your monitor.

Media Playback

- During video playback on all platforms, please do not change the display mode, position or arrangement of video player window (such as dragging the video player window between main display and attached display). This usually causes the video player to have strange behavior and the video may stop playing. We suggest stopping the video playback, moving the window to the USB graphics device attached display and then selecting the video clip to start playing.
- Downsizing your screen landscape lower than 50% will help smooth out jerky video playback for video running in full screen model.
- You may experience poor video performance on USB graphics device attached display under some low-spec PC system.
- Video rending using hardware overlays is supported.
- Some DVD playback software packages do not support playing on a second display adapter of any kind. You may try to open the media player in the secondary display first before start playing the DVD.

- Your PC may be lack of certain video codec to support playback of certain video format. Please use the link below to install license free media codec.

K- Lite: http://www.free-codecs.com/download/K_Lite_Codec_Pack.htm

- Video/Media players have different decoding capability under different display modes. For better performance on watching DVD or certain video format on the USB graphics device attached display, it is recommended to use the following license free software.
- **Windows Media Player 10 or above**
- **Media Player Classic**: http://sourceforge.net/projects/guliverkli/

Others

- Some graphics card, i.e. Intel, prevents other secondary graphics chipset from being set as the primary card. As the result of this**, Primary mode** might not work or the display maybe disabled.
- If you have problems during the boot up process, start your computer in Safe Mode and uninstall the driver. Hold the CTRL key until the Windows startup menu appears and select Safe Mode.
- To verify the driver version that you installed, please click "Control Panel" → "Add or Remove Programs" to check the program: Trigger External Graphics Family 14.xx.xxxx.0179 (the Number: 14.xx.xxxx.0179 means the driver version) or click the **About** of USB Display (Trigger) Utility icon at the taskbar.
- Please contact your dealer to obtain the latest driver or for additional assistance if needed.

REGULATORY COMPLIANCE

FCC

This equipment has been tested and found to comply with FCC Part 15 Subpart B § 15.109/15.107 Class B.

Operation is subject to the following two conditions:

• This device may not cause harmful interference

• This device must accept any interference, including interference that may cause undesired operation of the device.

CE

This equipment is in compliance with the requirements of the following regulations:

EN 55022 Class B (2006),

EN 55024 (1998+A1:2001+ A2:2003), (IEC/EN 61000-4-2 (1995+A1:1998+A2:2001)/-3(2006))

C-Tick

This equipment is in compliance with the requirements of the following regulations:

EN 55022 (2006) Class B, AS/NZS CISPR22 © IEC: 2005.

VCCI

This equipment is in compliance with the requirements of the following regulations:

CISPR22 © IEC: 2005

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